

REMARKS

Reconsideration is requested for Claims 59-77.

Initially, the undersigned wishes to thank Examiner Semunegus for her time, attention, and consideration during the interview at the U.S. Patent and Trademark Office in connection with this application on May 23, 2002, and for the subsequent telephone interview conducted with her and her supervisor that same day.

Independent claim 59 has been amended by the present Amendment after a final Official Action. Entry of the present amendment after the final Official Action is cordially urged in that the amendment is believed to more clearly place the claims in condition for allowance and will, in any event, reduce issues for consideration on appeal.

Claim 59 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,259,288 to *Vatsvog*. Claims 62 and 63 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Vatsvog*. Claims 60-61 and 64 were rejected under 35 U.S.C. § 103(a) and being unpatentable over *Vatsvog* in view of U.S. Patent No. 3,745,924 to Scanlon. Claims 65-77 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Vatsvog* in view of U.S. Patent No. 3,144,827 to *Boutwell*.

Claim 59, from which Claims 60-77 depend, as amended, defines a method of making an ammunition article, comprising the steps of injection molding plastic around at least a portion of a projectile to form a plastic cartridge casing body having a first end to which the projectile is attached and a second end.

The primary reference in all of the prior art rejections, *Vatsvog*, only discloses that a bullet 10 is *inserted* into the forward end of a plastic casing 12. See column 5, lines 63-

65. *Vatsvog* discloses nothing about molding plastic around a portion of the projectile to form a plastic cartridge casing body having a first end to which the projectile is attached and a second end, as recited in Claim 59. The patent, with reference to FIG. 12, refers to "the forward portion of case 112 being *molded* into canalure 160 as a means to hold projectile 110 in place". However, from FIG. 12, which shows a space 174 behind the projectile that would not be present if the casing were molded around the projectile, it is apparent that the "molding" operation to which the patent refers can only be some form of operation -- probably like the swaging operation described at Col. 6, line 65 -- performed *after* the casing is already formed. The present application explains that:

As seen in FIG. 13A, the cartridge casing body 23 is preferably made by molding plastic around at least the portion 31 of the projectile 29 to form the plastic cartridge casing body having the first end 25 to which the projectile is attached and a second end 27. Numerous plastic molding techniques are well known and are suitable for use in connection with the present application.

Page 14, liens 8-12. The present application also explains:

If desired or necessary, one or more attachment arrangements above and beyond the metal-plastic bond developed upon molding the plastic of the plastic cartridge casing body 23 around the portion 31 of the projectile 29 may be provided. The attachment arrangement 41 can be provided by, for example, heat bonding the projectile to the cartridge casing body, by adhesive bonding of the projectile to the cartridge casing body, or ultrasonic welding of the cartridge casing body to the projectile.

Page 15, lines 3-9. Thus, a distinction is drawn between "molding" as used in the present application and the type of attachment that is loosely referred to as "molding" in *Vatsvog*.

Solely to expedite prosecution, in addition to the foregoing distinction between "molding" as used in the description and claims of the present application and as loosely used in *Vatsvog*, claim 59 has been amended to recite that the molding is "injection"

molding. One skilled in the art would understand from the original disclosure of the present application that an injection molding operation is one of the molding techniques that is appropriate for use in the operations described at, e.g., Page 14, line 8, to Page 17, line 7. It would not be possible to form a casing with a space 174 between a projectile and the casing as shown in *Vatsvog* if an injection molding operation were performed.

In view of the differences between Claim 59 and *Vatsvog*, it is respectfully submitted that Claim 59 and the claims dependent therefrom, Claims 60-77, are not anticipated by *Vatsvog*. There is, in addition, no disclosure or suggestion of the steps of Claim 59 and *Vatsvog*, and it is respectfully submitted that it would not have been obvious to one of ordinary skill in the art to modify the disclosure of *Vatsvog* to preform the claimed method. Accordingly, it is respectfully submitted that Claim 59 and the claims dependent therefrom, define patentably over *Vatsvog*.

With respect to the secondary references, Scanlon and Boutwell, also do not disclose or suggest the method of Claim 59 and, for at least that reason, all of Claims 59 and the claims dependent therefrom, Claims 60-77, define patentably over a combination of *Vatsvog* and *Scanlon* or *Boutwell*. *Scanlon*, for example discloses that a projectile 18 is secured by a force fit in a mouth portion of a front end 16 of a body portion 14 of a plastic casing 12. See column 2, lines 48-51. *Boutwell* only discloses a blank cartridge.

It is respectfully submitted that all of the claims presently under consideration, Claims 59-77, are in condition for allowance. Allowance is cordially urged.

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If the Examiner should be of the opinion that a telephone conference would be helpful in resolving any outstanding issues, the Examiner is urged to contact the undersigned.

Respectfully submitted,

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Appendix

Kindly amend the claims as follows:

59. (Amended) A method of making an ammunition article, comprising the steps of:

injection molding plastic around at least a portion of a projectile to form a plastic cartridge casing body having a first end to which the projectile is attached and a second end.